

NSNFP Strategy Meeting FY02 Work Scope to Support DOE SNF

David S. Rhodes
Manager, DOE SNF
BSC, Special Projects
October 17-18, 2001

- **FY02 YMP Budget Overview**
 - Impacts to EM Program
 - Work for NSNFP
- **Status of FY01 Carryover Work**
- **Status of FY02 Work**

- **Congressional range \$275M to \$445M**
 - RW looking at \$410M
- **BSC “Projects” funding approximately \$129M**
- **Waste package design work this FY**
 - First few months selecting path forward to LA then design starts in March 2003
 - Start DSNF WP design work in FY02
 - Start Naval WP design work in FY02 (continuing into FY03)
- **Repository operations to receive SNF/HLW in 2010**
- **License Application date possibly February 2006**
- **Can’t plan any transportation activities yet**

■ FY01 TSPA analyses

- interaction calculation 99% with only PCG comments left (Oct.)
- original geochemistry report (early FY01) completed
- end of FY01 geochemistry report to be completed mid-Nov.
- pyrophoricity report 99% with only Hanford comment left (Oct.)
- running SNF calculations 85% will complete in October (continuing activity)

■ Integrated ICD Volume 1 on DOE SNF

- incorporating last comment set; send out by end of October

■ Waste package analyses

- internal consequence calculation needs Naval rep. approval
- revision of source term calculation to complete in October

■ Deferred waste form and waste package analyses

- external consequence code development
- external criticality analyses completion
- external probability calculations
- external transport & accumulation calculation
- begin external consequence AMR for DOE SNF
- \$348,000

■ FY02 Phase I, II, and III Analyses

- external consequence code qualification
- revise FFTF criticality calculation and waste form analyses
- benchmark and critical limit analysis
- external transport & accumulation calculation completion
- probability of criticality before 10,000 years for codisposal

■ FY02 Phase I, II, and III Analyses (continued)

- Configuration generator model validation
- Geochemistry model abstraction for codisposal waste package
- Criticality model validation
- Criticality management
- external consequence AMR for DOE SNF
- \$747,000

■ TSPA

- Geochemical interactions for failed codisposal waste package
- TSPA calculations for 11 fuel groups for LA
- \$200,000

■ DBE

- Canister strain argument for no-breach criteria
- Integrate DOE SNF analyses in Integrated Safety Assessment
- \$70,000

■ Management

- Licensing strategy (white paper) development
- Review NSNFP reports (waste form, GOTH, ASTM work)
- Management
- \$190,000

■ Deferred Pu - include probability analysis results

- Token deferred funding ~\$30,000 to include in report

- **Align estimated deferred funding with actual funding**
 - DOE SNF
 - Pu Disposition
- **Finish leftover FY01 activities ASAP**
- **Work the FY02 activities as planned**
 - waste package/waste form analyses, TSPA analyses, strain argument, ISA support
 - complete and approve white paper on safety strategy
 - approach to NRC technical exchange
 - reschedule NRC technical exchange